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Oliver Bohnenberger

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NIXON PEABODY, LLP

401 9TH STREET, NW

SUITE 900

WASHINGTON, DC 20004-2128

EXAMINER

VIZVARY, GERALD C

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,237	<b>Applicant(s)</b> BOHNENBERGER, OLIVER	
	<b>Examiner</b> GERALD C. VIZVARY	<b>Art Unit</b> 3696	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6/11/2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-31 and 33-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-31 & 33-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. In the amendment filed 6/11/2008, the following has occurred: Claims 7 & 32 have been cancelled. Claims 1, 25 & 26 have been amended. Now claims 1-6, 8-31 & 33-48 are presented for examination.

### ***Claim Rejections - 35 USC § 112***

2. The rejections of claims 3 & 28 under 35 USC § 112 are hereby withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-16, 19, 22, 26-41 & 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Ginsberg 5,774,880.

As per **claim 1** (Currently Amended), Ginsberg 5,774,880 teaches a processor-implemented method of filtering market data generated at a marketplace, for providing real-time trading status information, the method comprising:

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providing a plurality of listings, each listing associated with a corresponding market place and traded at the associated market place (“Turning now to FIG. 1, the overall information paths of the present invention are presented in block diagram form. Beginning with block 10, market data is collected from the plurality of on-line terminals operated by traders within the relevant bond market sector. A continual exchange of information flows between the traders, depicted in block 10, and the system proprietor, block 20, i.e., as bids, offers and trades are transacted in real time.” Ginsberg 5,774,880 col. 4, lines 32-34);

providing a set of filter criteria suitable for filtering market data to determine the trading status information (“On-line market data is then transferred to the data filter and enhancer module, block 40, which acts to clarify and articulate the continuous incoming market data for use, e.g., by data vendors, block 30.” Ginsberg 5,774,880 col. 4, lines 40-43);

receiving market data for at least one listing of the plurality of listings associated with a specific market place (“In the context of the present example, this closing data could represent the final price information received on a daily basis from the United States Federal Reserve for the United States Treasury market.” Ginsberg 5,774,880 col. 5, lines 9-11);

filtering the received market data in accordance with the set of filter criteria to determine in real-time, whether trading of the at least one listing has been suspended or resumed at the specific market place (“As market conditions change, the processor selectively updates some or all of the governing securities

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and based thereon modifies the index pursuant to a pre-established criteria.”

Ginsberg 5,774,880 col. 3, lines 50-54); and

providing, in real-time, the status information indicating whether trading of the at least one listing has been suspended or resumed at the specific market place,

wherein the set of filter criteria is selectively operable to filter at least one of the market data to determine a data field of the market data to be filtered and the market data to determine whether the at least one listing of the plurality of listings is representative for an index at the specific market place. (“The above and other

objects of the present invention are realized in a specific illustrative data processing system for the compilation of large quantities of disparate market data into discrete data files of varying reliability. The data is thereafter qualified and then processed to calculate on an iterative basis the term structure of interest rates in real time for a defined cross-section of the fixed income securities marketplace. These values are then used to price a select, specifically delineated portfolio of fixed income securities having varying terms to bridge an appreciable cross-section of the active market in fixed income securities. The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria.” Ginsberg 5,774,880 col. 3, lines 47-64)

As per **claim 2** (Original) Ginsberg 5,774,880 teaches a method of claim 1 wherein the received market data is real-time market data. ("Turning now to FIG. 1, the overall information paths of the present invention are presented in block diagram form. Beginning with block 10, market data is collected from the plurality of on-line terminals operated by traders within the relevant bond market sector. A continual exchange of information flows between the traders, depicted in block 10, and the system proprietor, block 20, i.e., as bids, offers and trades are transacted in real time." Ginsberg 5,774,880 col. 4, lines 32-34)

As per **claim 3** (Original) Ginsberg 5,774,880 teaches a method of claim 1, wherein the market place is a financial, stock, derivatives or commodity exchange, ECN or any other market place that generates market data subjected to electronic dissemination. ("In accordance with the varying aspects of the present invention, the system further includes an automated trading module for receiving market qualified buy and sell instructions for futures and options contracts tied to the basket of securities forming the index." Ginsberg 5,774,880 col. 3, line 65-col. 4, line 2)

As per **claim 4** (Original) Ginsberg 5,774,880 teaches a method of claim 1, wherein the providing of the plurality of listings comprises:  
providing a plurality of dual listings, each dual listing associated with a primary market place and a secondary market place and traded at the primary and

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secondary market places. ("In accordance with the varying aspects of the present invention, the system further includes an automated trading module for receiving market qualified buy and sell instructions for futures and options contracts tied to the basket of securities forming the index." Ginsberg 5,774,880 col. 3, line 65-col. 4, line 2)

As per **claim 5** (Original) Ginsberg 5,774,880 teaches a method of claim 4, wherein the received market data is received for at least one dual listing of the plurality of dual listings associated with a specific primary market place representing the specific market place. ("The above and other objects of the present invention are realized in a specific illustrative data processing system for the compilation of large quantities of disparate market data into discrete data files of varying reliability. The data is thereafter qualified and then processed to calculate on an iterative basis the term structure of interest rates in real time for a defined cross-section of the fixed income securities marketplace." Ginsberg 5,774,880 col. 3, lines 47-55)

As per **claim 6** (Original) Ginsberg 5,774,880 teaches a method of claim 5, wherein the providing of the status information comprises: providing to the secondary market place, in real-time, the status information indicating whether trading of the at least one dual listing has been suspended or resumed at the specific primary market place. ("Use of closing data from the Federal Reserve provides a complete set of data at a set point in time. After time, it becomes stale

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and needs to be updated rapidly with incoming asynchronous data on current transactions taking place in the market. This is accomplished via the flow path depicted in FIG. 4. Logic conceptually begins at start block 600 and inputs the set of qualified actives in real time (i.e., within seconds of actual changes in a security price in terms of offer, bid and trade values).” Ginsberg 5,774,880 col. 8, line 66-col. 9, line 7)

7. (Canceled)

As per **claim 8** (Original) Ginsberg 5,774,880 teaches a method of claim 1, wherein the market data comprises a first plurality of codes from a multiplicity of available codes and at least one filter criteria of the set of filter criteria comprises a second plurality of codes from the multiplicity of available codes, and wherein the filtering of the received market data comprises: comparing the codes of the first plurality of codes with the codes of the second plurality of codes to determine whether a match occurs. (“More particularly, the system iteratively determines the net present value for each of the four generic securities in the portfolio, including each coupon by correlating the coupon and maturity dates for the generic issues with the data set for spot rates; if a match occurs via test 780, the matching spot rate in the data set is used to calculate the NPV of the coupon, block 790, et seq. This is repeated for each coupon, J, and each generic security in the portfolio, K.”) Ginsberg 5,774,880 col. 9, lines 37-44)



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As per **claim 9** (Original) Ginsberg 5,774,880 teaches a method of claim 8, wherein the codes of the second plurality of codes are trading suspension codes. ("The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria." Ginsberg 5,774,880 col. 3, lines 57-64)

As per **claim 10** (Original) Ginsberg 5,774,880 teaches a method of claim 8, wherein the codes of the second plurality of codes are trading resume codes. ("The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria." Ginsberg 5,774,880 col. 3, lines 57-64)

As per **claim 11** (Original) Ginsberg 5,774,880 teaches a method of claim 1, wherein the market data comprises a first plurality of codes from a multiplicity of available codes, at least one filter criteria of the set of filter criteria comprises a second plurality of codes from the multiplicity of available codes and at least one filter criteria of the set of filter criteria comprises a third plurality of codes from the

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multiplicity of available codes, and wherein the filtering of the received market data comprises:

comparing the codes of the first plurality of codes with the codes of the second and third pluralities of codes to determine whether a match occurs. ("More particularly, the system iteratively determines the net present value for each of the four generic securities in the portfolio, including each coupon by correlating the coupon and maturity dates for the generic issues with the data set for spot rates; if a match occurs via test 780, the matching spot rate in the data set is used to calculate the NPV of the coupon, block 790, et seq. This is repeated for each coupon, J, and each generic security in the portfolio, K." Ginsberg 5,774,880 col. 9, lines 37-44)

As per **claim 12** (Original) Ginsberg 5,774,880 teaches a method of claim 11, wherein the codes of the second plurality of codes are trading suspension codes and the codes of the third plurality of codes are trading resume codes. ("The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria." Ginsberg 5,774,880 col. 3, lines 57-64)

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As per **claim 13** (Original) Ginsberg 5,774,880 teaches a method of claim 1, wherein: the market data comprises a plurality of codes from a multiplicity of available codes and each filter criteria of the set of filter criteria comprises a subset of codes from the multiplicity of available codes ("The filters within the system for data screening purposes are fluid to the extent that practice and historical results will influence the relative weight given any filter factor." Ginsberg 5,774,880 col. 6, lines 29-32), and

the filtering of the received market data comprises:

comparing the codes of the plurality of codes with each subset of codes to determine whether a match occurs ("A second criteria for retaining data involves comparing current bid/ask pricing with recent bid/ask pricing for differing securities. For example, if the current ask price of a given security is less than a recent bid price of the same or analogous security, this reflects a rapid shift in market conditions rendering the recent data unreliable. This process is depicted in test 330 with a positive response branching to block 340 for the removal of the disqualified data." Ginsberg 5,774,880 col. 6, lines 50-57); and

if, for a specific code of the plurality of codes, no match occurs, sending an alert message to the specific market place indicating that an unknown code has been received. ("This preset spread limit is adjustable and may be initially set at 5/32 seconds; i.e., a difference between bid and ask sides of the market of 5/32 seconds. A positive response to test 310, branches to block 320 wherein the system discards the price information for that security. This data is removed from

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the data set because such a wide spread reflects unusual market conditions for that security. Ginsberg 5,774,880 col. 6, lines 43-49)

As per **claim 14** (Original) Ginsberg 5,774,880 teaches a method of claim 13, further comprising:

receiving an update message from the specific market place indicating the meaning of the specific code of the plurality of codes; and updating the multiplicity of available codes using the update message. ("These decisions are enacted through computer terminals that are interconnected through international data networks and processors to effectuate in real time the display of quantities for bids and offers and the "hitting" and "taking" of those bids and offers which then result in an executed trade. These trades are then electronically displayed and distributed to a clearing processor and at the same time to data vendors for redistribution to the worldwide financial community." Ginsberg 5,774,880 col. 9, line 66-col. 10, line 7)

As per **claim 15** (Original) Ginsberg 5,774,880 teaches a method of claim 1, further comprising:

qualifying the received market data to determine accuracy and correctness of the received market data. ("It is another object of the present invention to provide an apparatus for the select processing of several types of data wherein data is qualified prior to use and translating the qualified data into a term structure of

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interest rates for a hypothetical portfolio of predetermined fixed income securities.” Ginsberg 5,774,880 col. 3, lines 36-40)

As per **claim 16** (Original) Ginsberg 5,774,880 teaches a method of claim 15, wherein the qualifying comprises:

qualifying the received market data to determine, whether a listing of the plurality of listings has been renamed. (“The first operation involves the qualification of the incoming market data transmitted to the system. This is accomplished via the logic structure depicted in FIG. 2. Logic conceptually begins at block 200 and proceeds to block 210, initiating the index variable loop assigning memory address locations for incoming price data, block 220. The first operation is to determine whether incoming data represents "closing" figures associated with the end-of-day trading (i.e., fixed in time).” Ginsberg 5,774,880 col. 5, lines 66-col. 6, line 7)

As per **claim 19** (Original) Ginsberg 5,774,880 teaches a method of claim 1, further comprising:

displaying, in real-time, the status information indicating whether trading of the at least one listing has been suspended or resumed at the specific market place. (“It is also an object of the present invention to provide a system for collecting in real time information on current market activity in fixed income securities and processing this information to quantify the term structure of interest rates in real time.” Ginsberg 5,774,880 col. 9, lines 37-44)

As per **claim 22** (Original) Ginsberg 5,774,880 further teaches a method of claim 1, wherein the providing of the status information comprises: providing a real-time market data information stream comprising the status information. ("It is also an object of the present invention to provide a system for collecting in real time information on current market activity in fixed income securities and processing this information to quantify the term structure of interest rates in real time." Ginsberg 5,774,880 col. 3, lines 31-35)

As per **claim 25** (Currently Amended), Ginsberg 5,774,880 teaches a computer-readable medium comprising computer-executable instructions that, when executed on a computer, operate the computer to filter market data generated at a market place, for providing real-time trading status information, the computer-readable medium comprising computer-executable instructions for: providing a plurality of listings, each listing associated with a corresponding market place and traded at the associated market place ("Turning now to FIG. 1, the overall information paths of the present invention are presented in block diagram form. Beginning with block 10, market data is collected from the plurality of on-line terminals operated by traders within the relevant bond market sector. A continual exchange of information flows between the traders, depicted in block 10, and the system proprietor, block 20, i.e., as bids, offers and trades are transacted in real time." Ginsberg 5,774,880 col. 4, lines 32-34);

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providing a set of filter criteria suitable for filtering market data to determine the trading status information (“Beginning with block 10, market data is collected from the plurality of on-line terminals operated by traders within the relevant bond market sector.” Ginsberg 5,774,880 col. 4, lines 40-43);

receiving market data for at least one listing of the plurality of listings associated with a specific market place (“The above-identified processing modules for receiving marker data and calculating a portfolio index based thereon are governed by a systems controlled program.” Ginsberg 5,774,880 col. 5, lines 9-11);

filtering the received market data in accordance with the set of filter criteria to determine in real-time, whether trading of the at least one listing has been suspended or resumed at the specific market place (“As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria.” Ginsberg 5,774,880 col. 3, lines 50-54); and

providing, in real-time, the status information indicating whether trading of the at least one listing has been suspended or resumed at the specific market place, wherein the set of filter criteria is selectively operable to filter at least one of the market data to determine a data field of the market data to be filtered and the market data to determine whether the at least one listing of the plurality of listings is representative for an index at the specific market place. (“The filters within the system for data screening purposes are fluid to the extent that practice and

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historical results will influence the relative weight given any filter factor.” Ginsberg 5,774,880 col. 6, lines 29-32)

As per **claim 26** (Currently Amended), Ginsberg 5,774,880 teaches a computer system for filtering market data generated at a market place to provide real-time trading status information, the computer system comprising:

a memory device for storing a plurality of listings, each listing associated with a corresponding market place and traded at the associated market place; and a set of filter criteria suitable for filtering market data to determine the trading status information (“The first operation involves the qualification of the incoming market data transmitted to the system. This is accomplished via the logic structure depicted in FIG. 2. Logic conceptually begins at block 200 and proceeds to block 210, initiating the index variable loop assigning memory address locations for incoming price data, block 220. The first operation is to determine whether incoming data represents "closing" figures associated with the end-of-day trading (i.e., fixed in time).” Ginsberg 5,774,880 col. 5, line 66-col. 6, line 7);

an input unit for receiving market data for at least one listing of the stored plurality of listings, the at least one listing being associated with a specific market place (“Logic conceptually begins at start block 600 and inputs the set of qualified actives in real time (i.e., within seconds of actual changes in a security price in terms of offer, bid and trade values).” Ginsberg 5,774,880 col. 9, lines 4-7);

a processor adapted to filter the received market data in accordance with the stored set of filter criteria to determine in real-time, whether trading of the at least



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one listing has been suspended or resumed at the specific market place (“As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria.” Ginsberg 5,774,880 col. 3, lines 50-54); and

an output unit for providing, in real-time, the status information indicating whether trading of the at least one listing has been suspended or resumed at the specific market place wherein the set of filter criteria is selectively operable to filter at least one of the market data to determine a data field of the market data to be filtered and the market data to determine whether the at least one listing of the plurality of listings is representative for an index at the specific market place.

(“The above and other objects of the present invention are realized in a specific illustrative data processing system for the compilation of large quantities of disparate market data into discrete data files of varying reliability. The data is thereafter qualified and then processed to calculate on an iterative basis the term structure of interest rates in real time for a defined cross-section of the fixed income securities marketplace. These values are then used to price a select, specifically delineated portfolio of fixed income securities having varying terms to bridge an appreciable cross-section of the active market in fixed income securities. The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based

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thereon modifies the index pursuant to a pre-established criteria.” Ginsberg 5,774,880 col. 3, lines 47-64)

As per **claim 27** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the received market data is real-time market data. (“Turning now to FIG. 1, the overall information paths of the present invention are presented in block diagram form. Beginning with block 10, market data is collected from the plurality of on-line terminals operated by traders within the relevant bond market sector. A continual exchange of information flows between the traders, depicted in block 10, and the system proprietor, block 20, i.e., as bids, offers and trades are transacted in real time.” Ginsberg 5,774,880 col. 4, lines 32-34)

As per **claim 28** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the market place is a financial, stock, derivatives or commodity exchange, ECN or any other market place that generates market data subjected to electronic dissemination. (“In accordance with the varying aspects of the present invention, the system further includes an automated trading module for receiving market qualified buy and sell instructions for futures and options contracts tied to the basket of securities forming the index.” Ginsberg 5,774,880 col. 3, line 65-col. 4, line 2)

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As per **claim 29** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the plurality of listings comprises a plurality of dual listings, each dual listing associated with a primary market place and a secondary market place and traded at the primary and secondary market places. ("In accordance with the varying aspects of the present invention, the system further includes an automated trading module for receiving market qualified buy and sell instructions for futures and options contracts tied to the basket of securities forming the index." Ginsberg 5,774,880 col. 3, line 65-col. 4, line 2)

As per **claim 30** (Original) Ginsberg 5,774,880 teaches a computer system of claim 29, wherein the at least one listing is a dual listing of the plurality of dual listings associated with a specific primary market place representing the specific market place. ("Once the NPV is set for all of the components in the portfolio, the system calculates the portfolio price, block 850, the yield to maturity, YTM, block 860, and the portfolio duration, block 870. This information is displayed and made available to the associated network as an index, updated in real time by current price data, in a manner analogous to the S & P 500 and Dow Jones 30 Industrials block 880." Ginsberg 5,774,880 col. 9, line 46-52)

As per **claim 30** (Original) Ginsberg 5,774,880 teaches a computer system of claim 30, wherein the output unit is adapted to provide to the secondary market place, in real-time, the status information indicating whether trading of the at least one dual listing has been suspended or resumed at the specific primary market

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place. ("These trades are then electronically displayed and distributed to a clearing processor and at the same time to data vendors for redistribution to the worldwide financial community." Ginsberg 5,774,880 col. 10, lines 4-7)

32. (Canceled)

As per **claim 33** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the market data comprises a first plurality of codes from a multiplicity of available codes and at least one filter criteria of the set of filter criteria comprises a second plurality of codes from the multiplicity of available codes, and wherein the processor is adapted to compare the codes of the first plurality of codes with the codes of the second plurality of codes to determine whether a match occurs. ("As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria." Ginsberg 5,774,880 col. 3, lines 61-64)

As per **claim 34** (Original) Ginsberg 5,774,880 teaches a computer system of claim 33, wherein the codes of the second plurality of codes are trading suspension codes. ("The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and

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based thereon modifies the index pursuant to a pre-established criteria.”

Ginsberg 5,774,880 col. 3, lines 57-64)

As per **claim 35** (Original) Ginsberg 5,774,880 teaches a computer system of claim 33, wherein the codes of the second plurality of codes are trading resume codes. (“The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria.” Ginsberg 5,774,880 col. 3, lines 57-64)

As per **claim 36** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the market data comprises a first plurality of codes from a multiplicity of available codes, at least one filter criteria of the set of filter criteria comprises a second plurality of codes from the multiplicity of available codes and at least one filter criteria of the set of filter criteria comprises a third plurality of codes from the multiplicity of available codes, and wherein the processor is adapted to compare the codes of the first plurality of codes with the codes of the second and third pluralities of codes to determine whether a match occurs. (“More particularly, the system iteratively determines the net present value for each of the four generic securities in the portfolio, including each coupon by correlating the coupon and maturity dates for the generic issues with the data set

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for spot rates; if a match occurs via test 780, the matching spot rate in the data set is used to calculate the NPV of the coupon, block 790, et seq. This is repeated for each coupon, J, and each generic security in the portfolio, K.” Ginsberg 5,774,880 col. 9, lines 37-44)

As per **claim 37** (Original) Ginsberg 5,774,880 teaches a computer system of claim 36, wherein the codes of the second plurality of codes are trading suspension codes and the codes of the third plurality of codes are trading resume codes. (“The forgoing portfolio is characterized in terms of an index value having a current market price (discount or premium from par), a true yield to maturity value (YTM) and a quantified duration. As market conditions change, the processor selectively updates some or all of the governing securities and based thereon modifies the index pursuant to a pre-established criteria.” Ginsberg 5,774,880 col. 3, lines 57-64)

As per **claim 38** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the market data comprises a plurality of codes from a multiplicity of available codes and each filter criteria of the set of filter criteria comprises a subset of codes from the multiplicity of available codes (“The filters within the system for data screening purposes are fluid to the extent that practice and historical results will influence the relative weight given any filter factor.” Ginsberg 5,774,880 col. 6, lines 29-32), wherein the processor is adapted to compare the codes of the plurality of codes with each subset of codes to

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determine whether a match occurs (“A second criteria for retaining data involves comparing current bid/ask pricing with recent bid/ask pricing for differing securities. For example, if the current ask price of a given security is less than a recent bid price of the same or analogous security, this reflects a rapid shift in market conditions rendering the recent data unreliable. This process is depicted in test 330 with a positive response branching to block 340 for the removal of the disqualified data.” Ginsberg 5,774,880 col. 6, lines 50-57); and

the output unit is adapted to send an alert message to the specific market place indicating that an unknown code has been received if, for a specific code of the plurality of codes, no match occurs. (“This preset spread limit is adjustable and may be initially set at 5/32 seconds; i.e., a difference between bid and ask sides of the market of 5/32 seconds. A positive response to test 310, branches to block 320 wherein the system discards the price information for that security. This data is removed from the data set because such a wide spread reflects unusual market conditions for that security. Ginsberg 5,774,880 col. 6, lines 43-49)

As per **claim 39** (Original) Ginsberg 5,774,880 teaches a computer system of claim 38, wherein the input unit is further adapted to receive an update message from the specific market place indicating the meaning of the specific code of the plurality of codes; and the processor is further adapted to update the multiplicity of available codes using the update message. (“These decisions are enacted through computer terminals that are interconnected through international data networks and processors to effectuate in real time the display of quantities for

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bids and offers and the "hitting" and "taking" of those bids and offers which then result in an executed trade. These trades are then electronically displayed and distributed to a clearing processor and at the same time to data vendors for redistribution to the worldwide financial community." Ginsberg 5,774,880 col. 9, line 66-col. 10, line 7)

As per **claim 40** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, wherein the processor is adapted to qualify the received market data to determine accuracy and correctness of the received market data. ("It is another object of the present invention to provide an apparatus for the select processing of several types of data wherein data is qualified prior to use and translating the qualified data into a term structure of interest rates for a hypothetical portfolio of predetermined fixed income securities." Ginsberg 5,774,880 col. 3, lines 36-40)

As per **claim 41** (Original) Ginsberg 5,774,880 teaches a computer system of claim 40, wherein the processor is further adapted to determine, whether a listing of the plurality of listings has been renamed. ("The first operation involves the qualification of the incoming market data transmitted to the system. This is accomplished via the logic structure depicted in FIG. 2. Logic conceptually begins at block 200 and proceeds to block 210, initiating the index variable loop assigning memory address locations for incoming price data, block 220. The first operation is to determine whether incoming data represents "closing" figures



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associated with the end-of-day trading (i.e., fixed in time).” Ginsberg 5,774,880 col. 5, lines 66-col. 6, line 7)

As per **claim 44** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26, further comprising:

a display device for displaying, in real-time, the status information indicating whether trading of the at least one listing has been suspended or resumed at the specific market place. (“Once the NPV is set for all of the components in the portfolio, the system calculates the portfolio price, block 850, the yield to maturity, YTM, block 860, and the portfolio duration, block 870. This information is displayed and made available to the associated network as an index, updated in real time by current price data, in a manner analogous to the S & P 500 and Dow Jones 30 Industrials block 880.” Ginsberg 5,774,880 col. 9, line 46-52)

As per **claim 48** (Original) Ginsberg 5,774,880 teaches a computer system of claim 28, wherein the output unit is adapted to provide a real-time market data information stream comprising the status information. (“These trades are then electronically displayed and distributed to a clearing processor and at the same time to data vendors for redistribution to the worldwide financial community.” Ginsberg 5,774,880 col. 10, lines 4-7)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 17, 18, 20, 21, 23, 24, 42, 43, 45, 46 & 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Ginsberg 5,774,880 in view of Broka 5,809,483.

As per **claim 17**, (Original) Ginsberg 5,774,880 teaches a method of claim 1. Ginsberg 5,774,880 fails to explicitly teach monitoring market data supply of at least one selected market place to determine an occurring supply outage; and providing in real-time, if a supply outage occurs, a corresponding indication of the occurring supply outage.

Broka 5,809,483 teaches ("More specifically, system for reporting the trading of debt issues has been developed which comprises a host processing system containing issue databases having information about debt issues available to be traded, and trade databases containing data about trades of the debt issues available to be traded;" Broka 5,809,483 col. 1 lines 61-64) The information debt issues available to be traded includes information regarding the point where the outage occurs.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitoring of market data supply of at least one selected market place to determine an occurring supply outage as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 18** (Original) Ginsberg 5,774,880 in view of Broka 5,809,483 teaches a method of claim 17.

Broka further teaches monitoring index information for the at least one selected market place; and if the index information is not received within a predetermined time interval, determining that a supply outage occurs. ("Administrators use the system control functions to manage the state (i.e., open, halted, or closed) of FIPS services, set the default times for each state of the FIPS services, and compose FIPS system news. The FIPS administrators control all aspects of the FIPS system including trade reporting, trade summary dissemination, quote management, and directory services." (Broka 5,809,483 col. 6, lines 8-14) The default times for the state of the services can be set according to any user parameters.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitoring index information as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the

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combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 20** (Original) Ginsberg 5,774,880 teaches a method of claim 1. Ginsberg 5,774,880 fails to explicitly teach displaying, in real-time, an alert message if it is determined that trading of the at least one listing has been suspended at the specific market place.

Broka 5,809,483 teaches "Quote management is mainly concerned with updating bid and ask prices. A quote in FIPS occurs when a user enters a bid and/or offer for a particular bond into FIPS. FIPS' quote management functions include entering, modifying, withdrawing, restoring, and removing quotes. Additional quote management functions include monitoring quote activity, disseminating quote data, and setting market alerts." (Broka 5,809,483 col. 5 lines 46-52)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include displaying, in real-time, an alert messages as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 21** (Original) Ginsberg 5,774,880 in view of Broka 5,809,483 teaches a method of claim 20.

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Broka 5,809,483 further teaches displaying of the alert message comprises: creating a pop-up window for displaying the alert message therein, the pop-up window being adapted to be closed only in response to user interaction. ("Preferably, a user interfaces with the FIPS host 210 through a standard GUI on the workstations 230 and 240. The GUI provides an easy-to-use system having only the information to which the user is entitled based on its role. This section describes the various user message windows for interfacing to the FIPS system." (Broka 5,809,483 col. 10 lines 36-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include creating a pop-up window for displaying the alert message as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 23** (Original) Ginsberg 5,774,880 teaches a method of claim 1.

Ginsberg 5,774,880 fails to explicitly teach performing an audible alert if it is determined that trading of the at least one listing has been suspended at the specific market place.

Broka 5,809,483 teaches "When an issue is added, modified, or deleted, a News Alert is sent (at the Administrators discretion) to other users if Newsworthy field 5068 is selected." (Broka, 5,809,483 col. 23 lines 16-18)

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It would have been obvious to one of ordinary skill in the art at the time of the invention to include performing an audible alert if of the at least one listing has been suspended as taught by Broka, 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 24** (Original) Ginsberg 5,774,880 teaches a method of claim 1.

Ginsberg 5,774,880 fails to explicitly teach attaching a flag to the received market data indicating a suspension of the at least one listing, if it is determined that trading of the at least one listing has been suspended at the specific market place.

Broka 5,809,483 teaches “The Authorize Participant window 5100 also allows an authorizer to set dates and times a participant is suspended from trading and can resume trading in particular issues by selecting the Times button 5170 from window 5100. In response to the authorizer selecting button 5170, FIPS displays Default Times window 5300 shown in FIG. 53. The authorizer enters a particular issue in field 5310. The authorizer then enters a suspend date and time in fields 5321 and 5322, respectively. A resume date and time may also be entered by the authorizer in fields 5330 and 5331, respectively. The field 5340 displays the current status of the issue. Once the authorizer has entered the desired

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information, he selects the Add button 5360 for the information to be processed by FIPS host 210.” (Broka 5,809,483 col. 24 lines 1-13)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include attaching a flag to the received market data indicating a suspension of the at least one listing as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 42**, (Original) Ginsberg 5,774,880 teaches a computer system of claim 26.

Ginsberg 5,774,880 fails to explicitly teach that the processor is adapted to monitor market data supply of at least one selected market place to determine an occurring supply outage; and the output unit is adapted to provide in real-time, if a supply outage occurs, a corresponding indication of the occurring supply outage.

Broka 5,809,483 teaches (“More specifically, system for reporting the trading of debt issues has been developed which comprises a host processing system containing issue databases having information about debt issues available to be traded, and trade databases containing data about trades of the debt issues available to be traded;” Broka 5,809,483 col. 1 lines 61-64) The debt issues

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available to be traded includes information regarding the point where the outage occurs.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitor market data supply of at least one selected market place to determine an occurring supply outage as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 43** (Original) Ginsberg 5,774,880 in view of Broka 5,809,483 teaches a method of claim 42.

Broka further teaches a processor is further adapted to monitor index information for the at least one selected market place; and to determine that a supply outage occurs, if the index information is not received via the input unit within a predetermined time interval. ("Administrators use the system control functions to manage the state (i.e., open, halted, or closed) of FIPS services, set the default times for each state of the FIPS services, and compose FIPS system news. The FIPS administrators control all aspects of the FIPS system including trade reporting, trade summary dissemination, quote management, and directory services." (Broka 5,809,483 col. 6, lines 8-14) The default times for the state of the services can be set according to any user parameters.



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It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitor index information for the at least one selected market place; and to determine that a supply outage occurs as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 45** (Original) Ginsberg 5,774,880 in view of Broka 5,809,483 teaches a method of claim 44.

Broka 5,809,483 further teaches that the processor is further adapted to create a pop-up window for displaying the alert message therein, the pop-up window being adapted to be closed only in response to user interaction, the pop up window for display on the display device. ("Preferably, a user interfaces with the FIPS host 210 through a standard GUI on the workstations 230 and 240. The GUI provides an easy-to-use system having only the information to which the user is entitled based on its role. This section describes the various user message windows for interfacing to the FIPS system." (Broka 5,809,483 col. 10 lines 36-41)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a pop-up window for displaying the alert message as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed

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the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 46** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26.

Ginsberg 5,774,880 fails to explicitly teach a speaker unit for performing an audible alert if it is determined that trading of the at least one listing has been suspended at the specific market place.

Broka 5,809,483 teaches "When an issue is added, modified, or deleted, a News Alert is sent (at the Administrators discretion) to other users if Newsworthy field 5068 is selected." (Broka, 5,809,483 col. 23 lines 16-18)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include performing an audible alert if of the at least one listing has been suspended as taught by Broka, 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per **claim 47** (Original) Ginsberg 5,774,880 teaches a computer system of claim 26.

Ginsberg 5,774,880 fails to explicitly teach a processor is further adapted to attach a flag to the received market data indicating a suspension of the at least

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one listing, if it is determined that trading of the at least one listing has been suspended at the specific market place.

Broka 5,809,483 teaches "The Authorize Participant window 5100 also allows an authorizer to set dates and times a participant is suspended from trading and can resume trading in particular issues by selecting the Times button 5170 from window 5100. In response to the authorizer selecting button 5170, FIPS displays Default Times window 5300 shown in FIG. 53. The authorizer enters a particular issue in field 5310. The authorizer then enters a suspend date and time in fields 5321 and 5322, respectively. A resume date and time may also be entered by the authorizer in fields 5330 and 5331, respectively. The field 5340 displays the current status of the issue. Once the authorizer has entered the desired information, he selects the Add button 5360 for the information to be processed by FIPS host 210." (Broka 5,809,483 col. 24 lines 1-13)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include attaching a flag to the received market data indicating a suspension of the at least one listing as taught by Broka 5,809,483, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-6, 8-31 & 33-48 have been considered, but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The following is prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Keith (2001/0042040 A1) teaches trading processes operative to route orders from order rooms to market processes, which process the orders according to respective market methodologies. The order routing strategy can be embodied in a decision table having rules with conditions and actions to be taken when the conditions are true. Accordingly, order rooms can readily configure and reconfigure trading processes.

Hausman (2004/0030632 A1) teaches programs, methods, and systems for variable pricing and conditional availability of proposals for trading of financial interests through the use of reference indices. The invention provides programs, methods, and systems for associating a proposal for a trade in at least one financial interest with at least one other financial interest or index, which may serve as a reference for effecting a condition of the proposal, including for example an availability of terms for the proposal to other traders, the executability of the proposal, etc.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ella Colbert can be reached on 571-272-6741. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4268.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ella Colbert/  
Primary Examiner, Art Unit 3696

Gerald Vizvary  
Patent Examiner, A.U. 3696  
August 11, 2008